

XXVII TEFLON COATING (REPAIR OF BALL VALVES)

		YES	NO
A	1A. Does supplier have procedures for Teflon Coating?	<input type="checkbox"/>	<input type="checkbox"/>

List procedures:

List Contract requirements

	1B. Do procedures meet environmental laws?	<input type="checkbox"/>	<input type="checkbox"/>
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	1C. How does supplier ensure compliance to local Environmental laws?		
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		YES	NO
	Coating Spray Area		

A	2A. Supplier's Teflon Coating Spray Area enclosed or isolated?	<input type="checkbox"/>	<input type="checkbox"/>
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A	2B. Supplier's Teflon Coating Spray Area exhausted?	<input type="checkbox"/>	<input type="checkbox"/>
	How?		

A	2C. Are adequate controls in place to protect from contamination?	<input type="checkbox"/>	<input type="checkbox"/>
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A	2D. Are adequate controls in place for Temperature, Humidity, and sources of contamination?	<input type="checkbox"/>	<input type="checkbox"/>
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B	2E. Adequate safety precautions established? (i.e., respirators, no smoking, no eating, washing of hands)	<input type="checkbox"/>	<input type="checkbox"/>
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	YES	NO
A 2F. Air supply for spray gun checked for moisture, oil, hydrocarbons?	<input type="checkbox"/>	<input type="checkbox"/>

A 2G. Spray gun checked for cleanliness prior to use?	<input type="checkbox"/>	<input type="checkbox"/>
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A 2H. Written Procedures for cleaning spray gun?	<input type="checkbox"/>	<input type="checkbox"/>
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Method used:

B 2J. What is the method to transport balls to spray area?

B 2K. What is the method to handle balls during transport?

A 2L. Are balls protected from contamination?	<input type="checkbox"/>	<input type="checkbox"/>
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How?

Primer and Final Coat Material		
A 3A. Are receipt inspections performed on Teflon coating material?	<input type="checkbox"/>	<input type="checkbox"/>

List inspections performed:

List primer used:

List final coat used:

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		YES	NO
A	3B. Are inspections performed on primer and final prior to use?	<input type="checkbox"/>	<input type="checkbox"/>

(Temperature, shelf life, separation)

List others:

A	3C. Are inspections documented? Batch Numbers recorded?	<input type="checkbox"/>	<input type="checkbox"/>
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A	3D. Primer and final coat strained prior to use?	<input type="checkbox"/>	<input type="checkbox"/>
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List methods:

A	3E. Storage requirements addressed?	<input type="checkbox"/>	<input type="checkbox"/>
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List method?

Ovens
A 4A. Type of Curing oven?

A 4B. Type of oxidizing oven?

A	4C. Written procedures for calibrating ovens?	<input type="checkbox"/>	<input type="checkbox"/>
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Method:

Intervals:

Last calibration date:

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	YES	NO
A 4D. Are ovens exhausted?	<input type="checkbox"/>	<input type="checkbox"/>

Method:

Inspection and Prep of balls for Teflon coating (Ball repair only)

A 5A. Procedure for cleaning balls in the as-received condition?	<input type="checkbox"/>	<input type="checkbox"/>
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List:

A 5B. Document acceptance procedure to determine acceptance for repair?	<input type="checkbox"/>	<input type="checkbox"/>
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5C. Are dimensions verified?	<input type="checkbox"/>	<input type="checkbox"/>
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A 5D. Surface condition inspected?	<input type="checkbox"/>	<input type="checkbox"/>
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A 5E. Generic tests performed to identify material?	<input type="checkbox"/>	<input type="checkbox"/>
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A 5F. Results of inspections documented?	<input type="checkbox"/>	<input type="checkbox"/>
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A 5G. Welding repair performed?	<input type="checkbox"/>	<input type="checkbox"/>
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List procedures:

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	YES	NO
A 5H. Additional Machining required to clean ball?	<input type="checkbox"/>	<input type="checkbox"/>

List operations:

List cutting fluids:

List method for obtaining 16 RHR finish (prior to oxidizing):

A 5J. Cutting fluids or lubricant source of oil or hydrocarbons?	<input type="checkbox"/>	<input type="checkbox"/>
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A 5K. Is ball inspected after machining or welding (dimensions porosity, surface finish) and documented?	<input type="checkbox"/>	<input type="checkbox"/>
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List others:

Cleaning after final machining/welding		
A 6A. Are solvents used to clean balls?	<input type="checkbox"/>	<input type="checkbox"/>

List solvents used:

A 6B. Solvents used a source of hydrocarbons? (If yes, note for question 6E.)	<input type="checkbox"/>	<input type="checkbox"/>
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A 6C. Ball dried before final cleaning?	<input type="checkbox"/>	<input type="checkbox"/>
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List procedure:

A 6D. Ball protected from contamination during drying?	<input type="checkbox"/>	<input type="checkbox"/>
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A 6E. Ball inspected for residual oils/hydrocarbons after cleaning/drying?	<input type="checkbox"/>	<input type="checkbox"/>
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XXVII TEFLON COATING (REPAIR OF BALL VALVES)**Oxidizing of Ball Surfaces****YES****NO**

A 7A. Specified time between drying and Oxidizing?

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A 7B. Specified temperature for Oxidizing?

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A 7C. Specified method to verify Oxidation?

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A 7D. Specified method to cool ball?

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A 7E. Ball protected from contamination during cooling?

☐☐**Final Surface Preparation prior to Teflon coating**

A 8A. List elapsed time between oxidation and final surface preparation:

A 8B. Method use to obtain 32 RHR surface preparation (after Oxidizing):

A 8C. Method use for grit blasting:

A 8D. Does grit blasting remove the oxide coating?

Yes**No**☐☐

A 8E. Grit blasting equipment checked for sources of moisture, oil or hydrocarbons?

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A 8F. Method used to clean ball after grit blasting:

List any solvents:

A 8G. Method use to dry ball after cleaning:

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		Yes	No
A	8H. Ball inspected for residual oils/hydrocarbons after cleaning and drying?	<input type="checkbox"/>	<input type="checkbox"/>

		Before	After
A	8J. Ball inspected for dimensions; before or after cleaning?	<input type="checkbox"/>	<input type="checkbox"/>

A	8K. Ball inspected for porosity; before or after cleaning?	<input type="checkbox"/>	<input type="checkbox"/>
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A	8L. Ball inspected for surface finish; before or after cleaning?	<input type="checkbox"/>	<input type="checkbox"/>
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A	8M. Ball inspected for other inspections; before/after cleaning?	<input type="checkbox"/>	<input type="checkbox"/>
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List inspections:

		YES	NO
A	8N. Inspections documented?	<input type="checkbox"/>	<input type="checkbox"/>

A	8O. How is ball handled and protected from contamination during inspection, cleaning and drying:
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Procedure used for applying prime coating

A	9A. Elapsed time between final surface preparation and application of primer coat:
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A	9B. Number of final coats:
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A	9C. Thickness of coats:
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A	9D. Elapsed time between coats:
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A	9E. Inspection for continuous and discontinuous coat	<input type="checkbox"/>	<input type="checkbox"/>
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A 9F. Method of drying primer coat:

A 9G. Method used to protect material from contamination during drying:

	YES	NO
A 9H. Is spray gun cleaned after primer coat?	<input type="checkbox"/>	<input type="checkbox"/>

Fusing/curing of primer coat

A 10A. Elapsed time between spray coating and curing:

	YES	NO
A 10B. Is material protected from contamination in transporting to ovens?	<input type="checkbox"/>	<input type="checkbox"/>

A 10C. Oven temperature settings:

A 10D. Method used to determine when primer is cured:

	YES	NO
A 10E. Temperatures and times in oven recorded?	<input type="checkbox"/>	<input type="checkbox"/>

A 10F. Method used to cool ball after curing:

	YES	NO
A 10G. Ball cleaned after cooling?	<input type="checkbox"/>	<input type="checkbox"/>

A 10H. Primer coat inspected after cooling (Visual, Thickness, Adhesion, or other)	<input type="checkbox"/>	<input type="checkbox"/>

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	YES	NO
A 10J. Inspections documented?	<input type="checkbox"/>	<input type="checkbox"/>

A 10K. Material protected from contamination while staging for final Teflon coating?	<input type="checkbox"/>	<input type="checkbox"/>
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Procedure used for applying final Teflon coating

A 11A. Elapsed time between primer and final application:

A 11B. Number of final coats:

A 11C. Thickness of coats:

A 11D. Elapsed time between coats:

	YES	NO
A 11E. Inspection for proper final coat application?	<input type="checkbox"/>	<input type="checkbox"/>

A 11F. Method of drying final coat:

A 11G. Method used to protect material from contamination during drying:

	YES	NO
A 11H. Is spray gun cleaned after final Teflon coat?	<input type="checkbox"/>	<input type="checkbox"/>

Fusing/curing of final Teflon coat

A 12A. Elapsed time between spray coating and curing:

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		YES	NO
A	12B. Is material protected from contamination in transporting to ovens?	<input type="checkbox"/>	<input type="checkbox"/>

A 12C. Oven temperature settings:

A 12D. Method used to determine when final Teflon is cured:

A	12E. Temperatures and times in oven recorded?	YES <input type="checkbox"/>	NO <input type="checkbox"/>
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A 12F. Method used to cool ball after curing:

A	12G. Ball cleaned after cooling?	YES <input type="checkbox"/>	NO <input type="checkbox"/>
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A	12H. Final coat inspected after cooling (Visual, Thickness, Adhesion, or other)	YES <input type="checkbox"/>	NO <input type="checkbox"/>
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A	12J. Inspections documented (i.e., adhesion test) ?	YES <input type="checkbox"/>	NO <input type="checkbox"/>
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A 12K. Explain how final Teflon coating inspections are documented.